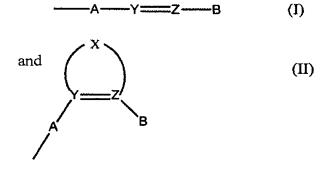
## CLAIMS

- 1. Cosmetic composition for treating keratin materials, comprising at least one cosmetic active agent, characterized in that it also comprises at least one compound comprising at least one photodimerizable group, this compound having a molecular mass of greater than 500 g/mol.
- 2. Cosmetic composition according to Claim 1, characterized in that the photodimerizable group(s) is (are) chosen from the monovalent radicals of formulae:



in which:

- Y and Z denote, independently of each other, a carbon or nitrogen atom,
- A is a divalent bonding group chosen from alkylene radicals, cycloaromatic radicals, heterocyclic radicals, carbonyl radicals and alkenylene radicals, and combinations thereof,

- B is a monovalent group chosen from alkyl radicals, cycloaromatic radicals, heterocyclic radicals, carbonyl radicals and alkenyl radicals, and combinations thereof,
- X is a divalent group chosen from alkylene radicals, cycloaromatic radicals, heterocyclic radicals, carbonyl radicals and alkenylene radicals, and combinations thereof, and each of the groups mentioned optionally being substituted with one or more groups chosen from alkyl, hydroxyl, amino, monoalkylamino or dialkylamino, halogen, aryl, carboxyl, alkoxy, alkoxycarbonyl, hydrogenocarbonyl, sulphonato, amide and acyl groups.
- 3. Cosmetic composition according to Claim 2, characterized in that the photodimerizable group(s) is (are) chosen from the monovalent radicals of the following compounds:
- stilbene,
- styrylpyridinium (stilbazolium) of formula:



in which

- R represents a hydrogen atom or an alkyl or hydroxyalkyl group, and
- R' represents a hydrogen atom or an alkyl group,
- styrylazolium of formula:



in which A denotes a sulphur atom, an oxygen atom or a group NR' or  $C(R')_2$ , R and R' being as defined above,

- styrylpyrazine,
- chalcone,
- (thio)cinnamate and (thio)cinnamamide,
- maleimide,
- (thio)coumarin,
- thymine,
- uracil,
- butadiene,
- anthracene,
- pyridone,
- pyrrolizinone,
- acridizinium salts,
- furanone,
- phenylbenzoxazole, and
- derivatives thereof.

- 4. Cosmetic composition according to any one of the preceding claims, characterized in that it is free of photoinitiator.
- 5. Cosmetic composition according to any one of the preceding claims, characterized in that the photodimerizable group(s) is (are) grafted onto a support compound.
- 6. Cosmetic composition according to Claim 5, characterized in that the support compound is chosen from poly(vinyl) polymers and polydiorganosiloxanes.
- 7. Cosmetic composition according to Claim 6, characterized in that the poly(vinyl) polymers are chosen from poly(vinyl acetates), preferably partially saponified.
- 8. Cosmetic composition according to any one of the preceding claims, characterized in that the compound(s) comprising at least one photodimerizable group is a polymer that is soluble or dispersed in the composition.
- 9. Cosmetic composition according to any one of the preceding claims, characterized in that the compound comprising at least one photodimerizable group is adsorbed onto polymer particles, which are themselves dispersed in the composition.
- 10. Cosmetic composition according to Claim9, characterized in that the particles are vinyl polymer particles.

- 11. Cosmetic composition according to Claim
  10, characterized in that the poly(vinyl) polymer is a
  poly(vinyl acetate).
- 12. Cosmetic composition according to Claim 9, characterized in that it concerns aqueous dispersions of a partially saponified polymer of polyvinyl acetate type bearing stilbazolium groups, placed in contact, especially blended, with polyvinyl acetate particles.
- 13. Cosmetic composition according to any one of the preceding claims, characterized in that the compound comprising at least one photodimerizable group represents 0.01% to 25%, preferably 0.1% to 20% and better still 1% to 15% of the total weight of the composition.
- 14. Cosmetic composition according to any one of the preceding claims, characterized in that it also comprises an effective amount of at least one photosensitizer.
- 15. Cosmetic composition according to Claim
  13, characterized in that the photosensitizer(s) is
  (are) chosen from thioxanthone, rose bengal, phloxin,
  eosin, erythrosin, fluorescein, acriflavine, thionine,
  riboflavine, proflavine, chlorophylls, haematoporphyrin
  and methylene blue, and mixtures thereof.
- 16. Cosmetic composition according to Claim
  14 or 15, characterized in that the photosensitizer(s)

represent(s) 0.00001% to 5% of the total weight of the composition.

- Cosmetic composition according to any one of the preceding claims, characterized in that the cosmetic active agent(s) is (are) chosen from hydrolysed or non-hydrolysed, modified or unmodified saccharides, oligosaccharides and polysaccharides; amino acids, oligopeptides, peptides, hydrolysed or non-hydrolysed, modified or unmodified proteins, polyamino acids and enzymes; branched or unbranched fatty acids and fatty alcohols; animal, plant or mineral waxes; ceramides and pseudoceramides; hydroxylated organic acids; UV-screening agents; antioxidants and free-radical scavengers; chelating agents; antidandruff agents; seborrhoea regulators; calmants; cationic surfactants; cationic or amphoteric polymers; organomodified or non-organomodified silicones; mineral, plant or animal oils; polyisobutenes and poly( $\alpha$ -olefins); esters; soluble or dispersed anionic polymers; soluble or dispersed nonionic polymers; reducing agents; dyestuffs; foaming agents; film-forming agents; particles; and mixtures thereof.
- 18. Cosmetic composition according to Claim 17, characterized in that the cosmetic active agent(s) represent(s) 0.001% to 30% of the total weight of the composition.

- 19. Cosmetic composition according to any one of the preceding claims, characterized in that it also comprises a cosmetically acceptable solvent or mixture of solvents.
- 20. Cosmetic composition according to Claim 19, characterized in that the solvent is chosen from water, alcohols, polyols and polyol ethers, and mixtures thereof.
- 21. Cosmetic composition according to Claim 20, characterized in that the alcohols are  $C_1$ - $C_6$  lower alkanols preferably chosen from ethanol, propanol and isopropanol.
- 22. Cosmetic composition according to Claim 20, characterized in that the polyols are chosen from propylene glycol, hexylene glycol, glycerol and pentanediol.
- 23. Cosmetic composition according to one of Claims 19 to 22, characterized in that the solvent(s) represent(s) 0.1% to 99% of the total weight of the composition.
- 24. Cosmetic composition, characterized in that it has a pH of between 2 and 12 and preferably between 3 and 11.
- 25. Cosmetic composition according to any one of the preceding claims, characterized in that it comprises at least one adjuvant chosen from fragrances, fillers, pH regulators and preserving agents.

- 26. Process for treating keratin materials, comprising the following steps:
- a) applying to the keratin materials a composition as defined according to any one of Claims 1 to 24, and
- b) irradiating the said composition on the keratin materials to crosslink the composition.
- 27. Process according to Claim 26, characterized in that it includes drying of the keratin materials, before the irradiation step and after the application step.
- 28. Process according to Claim 26 or 27, characterized in that it includes, before or after the irradiation step (b), an acting time at room temperature or with heat, or under a red lamp.
- 29. Composition according to one of Claims
  26 to 28, characterized in that it includes, before the
  irradiation step (b), a step of partial masking of the
  keratin materials, and, after the irradiation step (b),
  a rinsing step, or, when the keratin materials are
  hair, a shampooing or styling step.
- 30. Process according to Claim 29, characterized in that it includes, before the step of partial masking of the keratin materials and after the step of applying the composition, a step of drying the keratin materials.

- 31. Process according to any one of Claims 26 to 30, characterized in that the irradiation is irradiation with radiation in the UVA range or in the visible range, and preferably UVA radiation.
- 32. Process according to any one of Claims 26 to 31, characterized in that, when the keratin materials are hair, it also includes, before or after the irradiation step (b), a step of shaping the hair.
- 33. Process according to any one of Claims 26 to 31, characterized in that the compound(s) comprising at least one photodimerizable group is (are) also heat-dimerizable, and in that the irradiation step is replaced with a step of heating between 40 and 200°C.
- 34. Process according to any one of Claims 26 to 33, characterized in that the keratin materials are hair or nails.